

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

RESOLUTION NO. R6T-2006-0010

**REQUEST FOR CLEANUP AND ABATEMENT ACCOUNT FUNDS FOR AN
EMERGENCY ACTION TO PREVENT STORAGE POND OVERFLOW AT
LEVIATHAN MINE, ALPINE COUNTY**

Alpine County

Whereas, the California Regional Water Quality Control Board, Lahontan Region (Lahontan Water Board), finds:

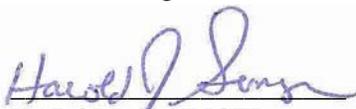
1. It is the responsibility of the Lahontan Water Board to regulate the activities and factors that affect or may affect the quality of waters of the region in order to achieve the highest water quality consistent with the maximum benefit to the people of the State;
2. The Water Quality Control Plan for the Lahontan Region (Basin Plan) was adopted in 1995. The Basin Plan identified the need to protect the surface and groundwaters of the Carson River Hydrologic Unit;
3. Leviathan Mine is an inactive sulfur mine that the State of California purchased in 1984 to pursue cleanup and abatement of water quality problems caused by historic mining. Jurisdiction over the mine rests with the State Water Resources Control Board (State Water Board), which, in turn, has delegated jurisdiction to the Lahontan Water Board. Leviathan Mine is located in Alpine County, approximately five miles east of Markleeville, California;
4. Degradation of water quality in Leviathan and Aspen Creeks occurs as result of the discharge of acid mine drainage (AMD) from Leviathan Mine. AMD from Leviathan Mine can be characterized as a dilute sulfuric acid solution containing dissolved metals, including: iron, aluminum, arsenic, nickel, and copper;
5. In May 2000, the United State Environmental Protection Agency (USEPA) placed Leviathan Mine on the Comprehensive Environmental Response, Compensation, and Liability Act National Priorities List, thus making Leviathan Mine a federal Superfund site. Because the State of California is the present property owner, USEPA has identified the State as a Potentially Responsible Party. USEPA issued an Administrative Abatement Action to the State requiring implementation of certain pollution abatement and site characterization activities at Leviathan Mine;
6. In 1985, on the State Water Board's behalf the Lahontan Water Board completed construction of a pollution abatement system that included the construction of five lined evaporation ponds to capture and evaporate AMD emanating from the Adit and the Pit Under-Drain (PUD). Given the limited usable area at the mine site, the evaporation ponds Could not be sized to provide 100 percent containment of influent flows (consisting of AMD from the Adit and PUD, and direct rain/snow onto the ponds); consequently, the ponds periodically overflowed and discharged to Leviathan Creek;

7. To prevent pond overflows, the Lahontan Water Board implemented a process to treat and discharge pond water during the summer months, as a means to increase pond holding capacity for the subsequent winter and spring months. The Lahontan Water Board successfully operated the treatment system during the 1999 through 2005 field seasons;
8. During the 2005 field season, the Lahontan Water Board was successful in treating all of the AMD contained in the pond system. This included emergency treatment in the spring to prevent potential pond overflow that resulted from above average precipitation during the 04-05 winter. Last year's above average precipitation recharged the groundwater in the area of the Mine, which has resulted in increased Adit and PUD flows. That increased flow, coupled with above average precipitation during the 05-06 water year, is causing the ponds to fill more rapidly than in prior years;
9. Due to these conditions, Lahontan Water Board staff estimate that overflow of the pond system will occur in early May 2006, or possibly earlier if precipitation is above average for the rest of the winter and spring. If left unabated, AMD having an approximate pH of 2.8 and elected concentrations of metals and metalloids (including iron, aluminum, arsenic, copper, and nickel) will overflow the pond system and enter Leviathan Creek;
10. To prevent the discharge of untreated AMD from the pond system, Lahontan Water Board staff proposes to secure a contract wherein a contractor will mobilize and operate an emergency treatment system to mix lime and the AMD will precipitate into a solid form. Treated AMD will then be discharged from the pond to Leviathan Creek;
11. Lahontan Water Board staff recommends implementation of emergency treatment of waters contained in the storage ponds in order to prevent the overflow of AMD to Leviathan Creek. The cost of this emergency work is dependent upon access conditions at the time of treatment and the volume and nature of the AMD needing treatment, but has been estimated to be as high as \$400,000;
12. The Lahontan Water Board considered all comments received;

THEREFORE BE IT RESOLVED:

1. The Lahontan Water Board requests the State Water Board to allocate \$400,000 from the Cleanup and Abatement Account pursuant to Water Code section 13443 to implement emergency pond water treatment to prevent the overflow of acid mine drainage to Leviathan Creek at Leviathan Mine.

I, Harold J. Singer, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Lahontan Region, on March 9, 2006.


HAROLD J. SINGER
EXECUTIVE OFFICER